

Materials List for:

Use of Enzymatic Biosensors to Quantify Endogenous ATP or H₂O₂ in the Kidney

Oleg Palygin¹, Vladislav Levchenko¹, Louise C. Evans¹, Gregory Blass¹, Allen W. Cowley Jr.¹, Alexander Staruschenko¹

¹Department of Physiology, Medical College of Wisconsin

Correspondence to: Alexander Staruschenko at staruschenko@mcw.edu

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Materials

Name	Company	Catalog Number	Comments
Sensor Kit	Sarissa Biomedical	SBK-ATP-05-125	The kit includes storage bottle, rehydration chamber, electrode leads, and reference electrodes. Also included with the kit is the user's choice of sensors.
Sarissaprobe ATP Biosensor 125 µm	Sarissa Biomedical	SBS-ATP-05-125	store at 2-8 °C before use
Sarissagold ATP Biosensor 50 µm	Sarissa Biomedical	SGS-ATP-10-50	store at 2-8 °C before use
Sarissaprobe null sensor 125 µm	Sarissa Biomedical	SBS-NUL-20-125	store at 2-8 °C before use
Sarissagold null sensor 50 µm	Sarissa Biomedical	SGS-NUL-10-50	store at 2-8 °C before use
Sarissaprobe ATP Manual	Sarissa Biomedical		http://www.sarissa-biomedical.com/media/31563/instructions-atp.pdf
Faraday cage	TMC		
Dual channel potentiostat	Digi-Ivy	DY2021	Type II Faraday cage
Data acquisition program	Digi-Ivy	DY2000	
Perfusion pump	Razel Scientific Instruments	Model R99E	
Fiber optic illuminator	Schott	ACE 1	
micromanipulator	Narishige	MM-3	
micromanipulator magnetic stand	Narishige	GJ-8	
air table	TMC	63-500	
isoflurane ventilator	LEI Medical	M2000	
3 ml petri dish	Fisher Scientific	S3358OA	
needle	Santa Cruz		26-30 G
pins			Standard dissection pins
catheter			Polyethylene tubing (PE50)
catheter tissue glue	Vetbond	1469SB	
suture	Look	SP117	
rubber bands			any 2-4 mm wide rubber bands
silicone	Momentive	RTV-615 Clear 1#	
clamp	Fine Science Tools	18052-03	
standard dissection kit			Kit should include scalpel and dissection scissors
Kidney Cup			Of own design
standard chemicals	Sigma-Aldrich		
ATP	Sigma-Aldrich	A6559-25UMO	100 mM ATP solution
hydrogen peroxide	Sigma-Aldrich	216763	

glycerol	Sigma-Aldrich	G9012	
Apyrase	Sigma-Aldrich	A7646	
Catalase	Sigma-Aldrich	C40	
isoflurane	Clipper	10250	
inactin	Sigma-Aldrich	T133	
ketamine	Clipper	2010012	
Hanks Balanced Salt Solution	Gibco	14025092	